Coral and sponge habitats in the Aleutian Islands

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ABSTRACT

A unique feature of the benthic habitat in the Aleutian Islands is the presence of a highly diverse and abundant coral and sponge community. Summaries of historical survey data and recent direct observations with a manned submersible indicate that the Aleutian Islands may harbor the highest diversity and abundance of temperate water coral and sponge communities in the world. These corals and sponges likely provide important habitat for a variety of fish and invertebrate species. Here we examine the spatial distribution of coral and sponge communities at small and large spatial scales. At a large scale based primarily on survey data we document the latitudinal and longitudinal patterns of abundance and diversity of these communities. At a small scale we describe habitat variability along a limited number submersible transects. The possible relationship between benthic community structure and geologic, oceanographic, and bathymetric features is examined.